For information, contact:

Arkie Fanning
Huntsville Center
Phone 256-895-1762

U.S. Army Engineering & Support Center, Huntsville
4820 University Square
Huntsville, Alabama 35816-1822
Fax 256-895-1798
http://www.hnd.usace.army.mil/oew/tech/techindx.html

OECert

Ordnance and Explosives Cost-Effectiveness Risk Tool

OECert calculates individual and public risk for exposure to unexploded ordnance. Individual risk is the probability of a person being exposed to ordnance during a given activity. Public risk is the sum of all the individual risks.

Application Benefits As a common methodology for all sites, OECert provides decision makers with a numerical value of risk reduction at a given site. Such data can help decision makers prioritize sites for clean up and determine how much clean up is needed to reach a certain risk level. OECert has the following applications:

- developing baseline risk estimate
- determining delta risk for each response alternative
- developing rough order of magnitude costs for each response alternative
- fitting response alternatives to costs
- prioritizing response alternatives at a site
- prioritizing all sites according to risk

How OECert Calculates Risk To calculate risk, OECert needs three parameters:

- specific activity on the site
- population of the surrounding area
- density of the ordnance in the effective area

Because some activities are riskier than others, OECert calculates risk for each activity. For example, camping carries more risk than walking or cycling, and construction work is one of the most risky activities. Those activities are represented within twenty-seven groups. Historic and future land use determine the specific activities for each site. Population information for each site comes from the census bureau, the local chamber of commerce, and archives search reports. The number of people performing an activity each year are determined by multiplying the population in a given area times the percent of that population performing the activity. Data on the density of ordnance comes from SiteStats/GridStats, a statistical tool used to characterize a site during investigation.

Product Testing OECert testing includes a peer review by the Naval War College and James Madison University.